DRAFT MEETING SUMMARY

NATIONAL TOXICOLOGY PROGRAM CENTER FOR THE EVALUATION OF RISKS TO HUMAN REPRODUCTION

EXPERT PANEL EVALUATION OF BISPHENOL A AUGUST 6-8, 2007

The National Toxicology Program (NTP) Center for the Evaluation of Risks to Human Reproduction (CERHR) convened an expert panel on August 6-8, 2007, in Alexandria, Virginia to evaluate bisphenol A. This was the second public meeting of the expert panel, a group of 12 independent scientists convened to review and assess scientific studies on the potential reproductive and developmental hazards of Bisphenol A.

Expert Panel Conclusions

For pregnant women and fetuses:

The Expert Panel expressed some concern that exposure to Bisphenol A in utero causes neural and behavioral effects.

The Expert Panel expressed minimal concern that exposure to Bisphenol A in utero causes effects on the prostate.

The Expert Panel expressed minimal concern that exposure to Bisphenol A in utero potentially causes accelerations in puberty.

The Expert Panel expressed negligible concern that exposure to Bisphenol A in utero produces birth defects and malformations.

For infants and children:

The Expert Panel expressed some concern that exposure to Bisphenol A causes neural and behavioral effects.

The Expert Panel had expressed minimal concern that exposure to Bisphenol A potentially causes accelerations in puberty.

For adults:

The Expert Panel expressed negligible concern for adverse reproductive effects following exposures in the general population to Bisphenol A. For highly exposed subgroups, such as occupationally exposed populations, the level of concern is elevated to minimal.

[The conclusions noted above are those of the Bisphenol A Expert Panel and should not be construed to represent the views of the NTP.]

Background on Bisphenol A

Bisphenol A is a high production volume chemical used primarily in the production of polycarbonate plastics and epoxy resins. Polycarbonate plastics are used in food and drink packaging; resins are used as lacquers to coat metal products such as food cans, bottle tops, and water supply pipes. Some polymers used

in dental sealants and tooth coatings contain bisphenol A. Exposure to the general population can occur through direct contact with bisphenol A or by exposure to food or drink that has been in contact with a material containing bisphenol A. CERHR selected this chemical for evaluation because of (1) high production volume, (2) widespread human exposure, (3) evidence of reproductive toxicity in laboratory animal studies, and (4) public concern.

The expert panel reviewed and evaluated the available scientific data on bisphenol A in three primary areas: human exposure, reproductive toxicity, and developmental toxicity. In their deliberations, the expert panel considered the quality, quantity, and strength of the scientific evidence that exposure to bisphenol A might cause adverse effects on human reproduction and/or development of the fetus or infant. The expert panel identified gaps in the available scientific data on the possible effects of bisphenol A and suggested areas where additional research is needed.

Next Steps

The final expert panel report on bisphenol A will be posted on the CERHR web site (*http://cerhr.niehs.nih.gov*) and available in printed text from CERHR in fall 2007. CERHR will solicit public comments on this report through an announcement in the <u>Federal Register</u>. Following this comment period, CERHR will prepare the NTP-CERHR monograph on bisphenol A consisting of an NTP brief, the expert panel report, and all public comments on that report. The NTP brief contains the NTP's opinion regarding whether current human exposures to bisphenol A are a risk for human development and reproduction. CERHR will solicit public comment on the NTP brief, after which it will undergo independent peer review. NTP will consider the public and peer review comments before finalizing the brief. The monographs will be available to the public in PDF format on the CERHR web site and in hardcopy by contacting CERHR and will be distributed to appropriate federal health and regulatory agencies.

Background on CERHR

The NTP established CERHR in 1998 as an environmental health resource to the public and to regulatory and health agencies. CERHR provides scientifically based, uniform assessments of the potential for adverse effects on reproduction and/or development caused to man-made or naturally occurring chemicals or chemical mixtures to which humans are exposed. CERHR convenes independent panels of scientific experts to conduct its evaluations. Expert panel meetings are open to the public and the public is invited to nominate scientists to serve on these panels. Following completion of the evaluation of a chemical, the NTP prepares an a NTP-CERHR monograph that contains its opinion on the potential for the chemical to be a reproductive and/or developmental hazard, the expert panel report, and public comments received on the final expert panel report. NTP-CERHR monographs on other chemicals evaluated by CERHR include seven phthalates, methanol, 1-bromopropane, 2-bromopropane, ethylene glycol, propylene glycol, fluoxetine, acrylamide, amphetamines, methylphenidate, and styrene. These monographs are available on the CERHR website and in hardcopy or CD from CERHR.

Questions about the expert panel review of bisphenol A or about CERHR can be directed to Dr. Michael Shelby, CERHR Director, at 919-541-3455 or *shelby@niehs.nih.gov*.